

Metabolic Syndrome: useful or not?

Debate about the clinical usefulness of metabolic syndrome has been ongoing since it was first described in the late 1980's. Proponents of the syndrome encourage its use as a clinical tool to help identify people who may be at higher risk of cardiovascular disease and diabetes.¹ Critics however, suggest that making a diagnosis of metabolic syndrome is no more useful than an assessment of the individual risk factors alone.²

What there is agreement on is that:

- There is an association of certain metabolic factors that is not due to chance alone
- These risk factors, either by themselves or in combination, are associated with an increased risk of cardiovascular disease and diabetes
- There is no definitive treatment for metabolic syndrome

Metabolic syndrome is characterised by the presence of the following risk factors:

- Hypertension
- Insulin resistance
- Dyslipidaemia – increased triglycerides and decreased HDL
- Abdominal obesity

This clustering of risk factors with a metabolic origin is not thought to be grouped by chance alone and may be seen frequently in day to day practice.^{1,4}

Those supportive of the syndrome suggest that it may help to:^{1,3}

- Focus both patients and clinicians attention on the need for lifestyle intervention
- Identify future risks of cardiovascular disease and type 2 diabetes
- Focus attention on a number of relatively minor abnormalities that add up to a significant cardiovascular disease risk; in other words a synergistic effect of multiple risk factors
- Encourage regular follow up

Those who argue against the syndrome suggest that:^{3,5}

- There is an ongoing debate regarding the terminology, definition and diagnostic criteria for the syndrome
- There is a lack of a biological basis for the diagnostic algorithm
- It fails to include other important risk factors for cardiovascular disease such as age and smoking
- Treatment of individual risk factors is as good as treatment of metabolic syndrome
- Using a label of metabolic syndrome may detract from the real issues such as cardiovascular disease or diabetes

The latest research from an analysis of longitudinal data from two population based studies has shown that having a diagnosis of metabolic syndrome has a weak or negligible association with cardiovascular disease and that a fasting blood glucose test alone is better at predicting future diabetes.⁵

It seems that the arguments for and against will continue to be debated in the clinical literature for some time. In light of the latest research the only value of the syndrome may be that it is useful simply as a basis for guiding risk assessment and promoting lifestyle interventions.⁶

References:

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